12/20/11

10/790,316

# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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In re Application of:

Haase, Richard A.

Filed: March 1, 2004

Title: Water Combustion Technology -Methods, Processes, Systems and Apparatus for the Combustion of Hydrogen and Oxygen

Serial No.: 10/790,316

A continuation of PCT/US 03/11250 and PCT/US 03/41719

Claiming Priority of: PCT/US 03/11250 filed 4/10/03, PCT/US 03/41719 filed 10/11/03, 60/447,880 filed 2/14/03, 60/404,644 filed 8/19/02. 60/379,587 filed 5/10/02, and 60/371,768 filed 4/11/02.

Art Unit: 3748

Examiner: Hoang M. Nguyen

**US Express Mail** 

Mail Stop: Petitions The Honorable Commissioner for Patent and Trademarks **US PTO** P.O. Box 1450

Alexandria, VA 22313-1450

# PETITION TO WITHDRAW HOLDING OF ABANDONMENT

Enclosed for filing in the above-identified patent application is:

- 1. Transmittal Letter (2 pages);
- 2. Amendment/Argument (10 pages);
- 3. Statement Under 37 CFR 3.73(b), form PTO/SB/96 (1 page + 4 page attachment);
- 4. Replacement Figures (28 pages);
- 5. New Figures (2 pages);
- Declaration of Richard Alan Haase (5 pages);
- 7. USPTO Publications Branch to File Corrected Application Papers (3 pages);
- 8. USPTO Publications Branch Notice of Abandonment (1 page);
- 9. Express mail receipt No. EG 530943228 US, and
- 10. Post card, which is appreciated returned upon receipt.

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# **CERTIFICATE OF MAILING**

I hereby certify that this correspondence and all documents referred to as being enclosed or attached is being sent by Express Mail Receipt No. EG 530943228 US to: Mail Stop: Petitions, The Honorable Commissioner for Patents and Trademarks, US PTO, P.O. Box 1450, Alexandria, VA 22313-1450.

December 20, 2011 Date of Mailing

Richard A. Haase

### Respectfully submitted,



Richard A. Haase, Pro Se' Applicant

4402 Ringrose Drive Missouri City, Texas 77459 Telephone: 281.261.9543

Facsimile: 281.261.6505

Date: December 20, 2011

Richard A. Haase

richard.haase@clearvalue.com

Representing: ClearValue Technologies, Inc.; & Richard Alan Haase

### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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In re Application of:

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Methods, Processes, Systems and Apparatus for the Combustion of

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A continuation of PCT/US 03/11250

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PCT/US 03/11250 filed 4/10/03, PCT/US 03/41719 filed 10/11/03,

60/447,880 filed 2/14/03, 60/404,644 filed 8/19/02,

60/379,587 filed 5/10/02, and

60/371,768 filed 4/11/02.

Art Unit: 3748

Examiner: Hoang M. Nguyen

Mail Stop: Petitions

The Honorable Commissioner for Patent and Trademarks

P.O. Box 1450

Alexandria, VA 22313-1450

**US Express Mail** 

#### PETITION TO WITHDRAW HOLDING OF ABANDONMENT

Please enter this Petition to withdraw holding of abandonment, which is responsive to the Patent Publications Branch Office Action of July 22, 2011 and Notice of Abandonment dated October 7, 2011.

#### **REMARKS**

Applicant respectfully requests favorable consideration of this petition to withdraw holding of abandonment.

## **Status of Pending Claims:**

Claims 216-220, 222-229, 231-232, 235, 237-253, 258-260, 342 and 350 are pending in this application.

Claims 216, 218-219, 221-229, 231-232, 235, 237, 239-245, 247-250, 252-253, 258-260, 342 and 350 are (Previously presented).

Claims 217, 220, 225-226, 238, 246 and 251 are (Original).

Claims 1-215, 221, 230, 233-234, 236, 254-257 are (Canceled).

Claims 261-341 and 343-349 are (Withdrawn).

There are no claims which are (Currently amended).

There are no claims which are (New).

## **Summary of Patent Publications Branch Notice to File Corrected Application Papers:**

The illustration(s) on Page(s) 7, 47 do not come within the exceptions of 37 CFR 1.58(a). Please delete the illustration(s) from the specification, provide the illustration(s) as part of the formal drawing(s) in accordance with 37 CFR 1.84, and amend the specification, as necessary, in accordance with 37 CFR 1.74.

#### **Patent Publications Branch Notice of Abandonment:**

1.	The applicant's failure to timely file a proper reply to the Office letter mailed on $\frac{67-22-11}{2}$ .
	(a) A reply was received on (with a Certificate of Mailing or Transmission date ), which is after the expiration of the period for reply (including a total extension of month(s)) which expired on
	(b) Ø No reply has been received.

#### **Instant Claim Accounting:**

This amendment, which is responsive to the Office Action of the Patent Publications Branch dated July 22, 2011, does not amend the instant claims. Therefore, Applicant has no additional claim fee due.

#### **Unintentional Abandonment:**

Applicant apologizes for the unintentional abandonment of the instant application.

While Applicant does not normally and has not previous had an issue to receive mail from the United States Patent and Trademark Office, most unfortunately and in this instance, Applicant did not receive the Office Action of the Patent Publications Branch dated July 22, 2011, as is evidenced herein.

### In the Claims (There is no amendment)

Claims 1 – 215 (Canceled)

216. (Previously presented) An engine comprising a combustion chamber, wherein a mixture of oxygen, as O<sub>2</sub>, and hydrogen, as H<sub>2</sub>, is combusted, creating steam, wherein

at least a portion of the oxygen is obtained by the separation of air, wherein the separation of air is selected from the group consisting of:

- (a) cryogenic separation,
- (b) membrane separation,
- (c) pressure swing adsorption, and any combination thereof, wherein

the air separation is at least partially powered by torque or mechanical rotating energy, wherein

the torque or mechanical rotating energy is at least partially obtained from at least one of:

the steam turning a steam turbine,

the steam in the combustion chamber driving a piston,

the steam in the combustion chamber driving a steam turbine, and any combination therein, and wherein

the temperature of combustion is at least partially controlled with the addition of water or steam to the combustion chamber in a way that maintains the temperature of combustion or of combustion exhaust.

### 217. (Canceled)

- 218. (Previously presented) The engine of claim 216, wherein said torque or said mechanical rotating energy turns a generator to create electrical energy.
- 219. (Previously Presented) The engine of claim 216, wherein the steam produced by combustion turns a steam turbine, and wherein

said steam turbine turns a generator to create electrical energy.

- 220. (Original) The engine of claim 216, wherein heat is created.
- 221. (Canceled).
- 222. (Previously presented) The engine of claim 218 or 219, wherein at least a portion of said electrical energy is used in the electrolysis of water to hydrogen and oxygen, and wherein

at least a portion of at least one of said hydrogen and oxygen is used in said mixture.

- 223. (Previously presented) The engine of claim 216, further comprising nitrogen or argon in said mixture.
- 224. (Previously presented) The engine of claim 216, wherein said oxygen further comprises air.
- 225. (Original) The engine of claim 216, wherein at least a portion of the steam produced by combustion is converted to hydrogen by the corrosion of at least one metal.
- 226. (Original) The engine of claim 225, wherein the conversion of said steam into said hydrogen is increased by an electrical current in said metal(s).
- 227. (Previously presented) The engine of claim 225 or 226, wherein said hydrogen is at least partially used in said mixture.
- 228. (Previously presented) The engine of claim 216, wherein a generator turns due to the movement of air or water, and wherein

said generator creates electrical energy, and wherein

said electrical energy is at least partially utilized in the electrolysis of water to hydrogen and oxygen, and wherein

at least a portion of at least one of said hydrogen and oxygen is used in said mixture.

229. (Previously presented) The engine of claim 216, wherein a photovoltaic cell creates electrical energy, wherein

said electrical energy is at least partially used in the electrolysis of water to hydrogen and oxygen, and wherein

at least a portion of at least one of said hydrogen and oxygen is used in said mixture.

- 230. (Canceled).
- 231. (Previously presented) The engine of claim 216, wherein at least a portion of the nitrogen separated from air in said cryogenic air separation unit is used to cool any portion of at least one selected from a list consisting of: said cryogenic air separation unit, the storage of oxygen, the storage of hydrogen, electrolysis, coolant for said engine, said engine and any combination thereof.
- 232. (Previously presented) The engine of claim 231, wherein said nitrogen separated from air in said cryogenic air separation unit is at least partially used to cool air or water.
- 223 234. (Canceled).
- 235. (Previously presented) The engine of claim 216, wherein said oxygen separated from air is at least one of enriched oxygen, pure oxygen and very pure oxygen.
  - 236. (Canceled).
- 237. (Previously Presented) The engine of claim 216, wherein at least one selected from a list consisting of a: corrosion inhibitor, chelant, dispersant and any combination therein is added to at least a portion of the water in said engine.
- 238. (Original) The engine of claim 216, wherein said engine performs at least one of: internal, turbine and heating combustion.
- 239. (Previously Presented) The engine of claim 216, wherein at least one of oxygen and hydrogen is stored in at least one of a cooled gas state and a liquid state by liquefaction.
- 240. (Previously Presented) The engine of claim 239, wherein compressor(s) for at least one of cooling and liquefaction is powered by at least one of said engine and a fuel cell.

- 241. (Previously Presented) The engine of claim 240, wherein said fuel cell is powered by hydrogen and at least one of oxygen and air.
- 242. (Previously Presented) The engine of claim 216, wherein at least one of said hydrogen and oxygen is stored in a mixture with frozen water crystals to form a gel.
- 243. (Previously presented) The engine of claim 216, wherein at least one selected from a list consisting of: hydrogen, oxygen and water is preheated prior to combustion with the energy from at least one selected from a list consisting of: ambient temperature, said engine, said engine exhaust, an electrical radiant heat source and any combination therein.
- 244. (Previously presented) The engine of claim 216, wherein said mechanical rotating energy enters a transmission, wherein

said transmission engage in a manner that is inversely proportional to at least one of the torque and work output of said engine, and wherein

said transmission output mechanical rotating energy turns a generator to create electrical energy.

- 245. (Previously presented) The engine of claim 244, wherein said transmission engage a flywheel capable of storing said mechanical rotational energy.
- 246. (Original) The engine of claim 244, wherein at least a portion of said electrical energy is used in the electrolysis of water to hydrogen and oxygen.
- 247. (Previously presented) The engine of claim 246, wherein at least a portion of at least one of said hydrogen and oxygen is used in said mixture.
- 248. (Previously Presented) The engine of claim 216 or 219, wherein a pressure control device is in said engine exhaust.
- 249. (Previously Presented) The engine of claim 216, wherein at least one of said engine combustion heat energy and said engine exhaust energy is used to heat at least one of a gas and a liquid.
  - 250. (Previously Presented) The engine of claim 249, wherein at least one of the gas

is air and the liquid is water.

- 251. (Original) The engine of claim 250, wherein said exhaust discharge directly into said air or water.
- 252. (Previously presented) The engine of claim 216, wherein at least a portion of said engine is insulated.
- 253. (Previously presented) The engine of claim 216, wherein hydrogen is separated from at least one selected from a list consisting of: water, air, nitrogen, oxygen and any combination thereof within said air separation unit.
- 254 257. (Canceled).
- 258. (Previously presented) The engine of claim 216, wherein the temperature of said engine exhaust is at least partially cooled with the addition of water to said engine exhaust.
  - 259. (Previously presented) The engine of claim 258, comprising jet propulsion.
- 260. (Previously presented) The engine of claim 216 or 258, comprising rocket propulsion.
- Claims 261 341 (Canceled).
- 342. (Previously presented) The engine of claim 216, wherein said engine comprises a turbine.
- Claims 343 349 (Canceled).
- 350. (Previously presented) The engine of claim 216, comprising jet propulsion wherein air is stoichiometrically increased in the jet intake for hydrogen thermodynamics and/or to operate with excess air for cooling.

### In the Specification

In the instant specification, as published on page 3, is a diagram labeled "Flow Diagram 1", and which located between paragraphs [0023] and [0024]; delete the flow diagram.

In the instant specification, as published on page 19, is a diagram labeled "Flow Diagram 2", which located within paragraph [201], and which is located within Example 6; delete the flow diagram. Do not delete paragraph wording; only delete the figure.

In the instant specification, as published on page 3, amend paragraph [0023] as indicated below:

There are many methods and processes utilized for cryogenic refrigeration, which is a component of cryogenic distillation. A good reference of cryogenic refrigeration methods and processes known in the art would be "Cryogenic Engineering," written by Thomas M. Flynn and printed by Dekker. As written by Flynn, cryogenic refrigeration and liquefaction are the same processes, except liquefaction takes off a portion of the refrigerated liquid which must be made up, wherein refrigeration all of the liquid is recycled. All of the methods and processes of refrigeration and liquefaction are based upon the same basic refrigeration principals, as depicted in Flow Diagram 1Figure 25.

In the instant specification, as published on page 9, amend paragraph [0077] as indicated below:

FIGS. 1 and IA provide a key to the symbols of Flow Diagram 1 and FIGS. 2 through 2[[4]]6.

In the instant specification, as published on page 11, add a new paragraph after paragraph [0101] as indicated below:

**FIG. 25** illustrates in bock diagram form a general description of the methods and processes of refrigeration and liquefaction.

In the instant specification, as published on page 11, add a second new paragraph after the new paragraph above, which is after paragraph [0101] as indicated below:

FIG. 26 illustrates in bock diagram form a general description of the methods and processes of a jet engine.

To correct figures pagination, replace figures 1-24 as included herein and marked "Replacement Sheet". Add figures 25 and 26 as included herein and marked "New Sheet".

## **Examiner's Rejections and Applicant's Responsive Arguments**

### **Patent Publications Branch Notice:**

The illustration(s) on Page(s) 7, 47 does not come within the exceptions of 37 CFR 1.58(a). Please delete the illustration(s) from the specification, provide the illustration(s) as part of the formal drawing(s) in accordance with 37 CFR 1.84, and amend the specification, as necessary, in accordance with 37 CFR 1.74.

#### **Applicant's Response**

Applicant respects and appreciates time of the Patent Publications Branch to prepare the Notice.

Applicant has respectfully amended the instant specification in accordance with 37 CFR 1.121, along with 37 CFR 1.74 and the instant drawings in accordance with 37 CFR 1.84. Therefore, the instant specification contains no new matter and is complete in content as submitted; while, there are no illustrations on instant specification pages 7 or 47 which would be within exception of 37 CFR 1.58(a).

### **Patent Publications Branch Notice:**

1. $M$ The applicant's failure to timely file a proper reply to the Office letter mailed on $\frac{\partial \sqrt{-22-11}}{\partial x^2}$ .
(a) A reply was received on (with a Certificate of Mailing or Transmission date), which is
after the expiration of the period for reply (including a total extension of month(s)) which expired on
(b) ₩ No reply has been received.

#### **Applicant's Response**

Applicant respects and appreciates time of the Patent Publications Branch to prepare the Notice.

Applicant respectfully informs and states to the United States Patent and Trademark Office that it was not until October of 2011 that Applicant was aware of the Notice to file corrected application papers mailed by the Patent Publications Branch on July 22, 2011, as is evidenced in the attached declaration of Applicant. Applicant did not receive the Notice to file corrected application papers mailed by the Patent Publications Branch, as is evidenced in the attached declaration of Applicant. Applicant provides a copy of Applicant's docket in relation to this matter, wherein is indicated that Applicant did not receive the Notice to file corrected application papers mailed by the Patent Publications Branch, as exhibited in the attached declaration of Applicant. Applicant has no master docket. Further, Applicant has searched his files in attempt to locate the Notice to file corrected application papers mailed by the Patent Publications Branch finding no received Notice, only the Notice obtained in October 2011 from Public Pair at uspto.gov.

### **CONCLUSION**

Applicant has respectfully traversed both the Notice to File Corrected Application Papers and the Notice of Abandonment of the Patent Publications Branch.

Applicant respectfully requests publication of the allowed claims with the instant specification, as amended herein.

Respectfully submitted,



Date: December 20, 2011

Richard A. Haase 4402 Ringrose Drive Missouri City, Texas 77459

Telephone: 281.261.9543 Facsimile: 281.261.6505

richard.haase@clearvalue.com

Richard A. Haase, Pro Se'

Representing: ClearValue Technologies, Inc.; & Richard A. Haase PTO/SB/96 (09-04)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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Under the Raperwork Reduction Act of 1995, no persons are required to respond to a conection of information driftes it displays a valid CMD condition in the co
STATEMENT UNDER 37 CFR 3.73(b)
Applicant/Patent Owner: Richard Alan Haase
Application No./Patent No.: 10/790,316 Filed/Issue Date: March 1, 2004
Entitled:
Clear Value Technologies, a Corporation (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)
states that it is:  1. the assignee of the entire right, title, and interest; or
2. an assignee of less than the entire right, title and interest.  The extent (by percentage) of its ownership interest is%
in the patent application/patent identified above by virtue of either:
A. An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel, Frame, or for which a copy thereof is attached.
OR  B. A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as shown below:
1 From:
From: To:  The document was recorded in the United States Patent and Trademark Office at
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2. From: To:
The document was recorded in the United States Patent and Trademark Office at
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Additional documents in the chain of title are listed on a supplemental sheet.
Copies of assignments or other documents in the chain of title are attached.  [NOTE: A separate copy (i.e., a true copy of the original assignment document(s)) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the USPTO. See MPEP 302.08]
The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.
Signature Date
Richard Alen Hean 281-261-9543
Printed or Typed Name Telephone Number
President & CEO
Title

This collection of information is required by 37 CFR 3.73(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.





### UNITED STATES PATENT AND TRADEMARK OFFICE

UNDER SECRETARY OF COMMERCE FOR INTELLECTUAL PROPERTY AND DIRECTOR OF THE UNITED STATES PATENT AND TRADEMARK OFFICE

DECEMBER 09, 2009

**PTAS** 



\*103580983A

RICHARD ALAN HAASE 4402 RINGROSE DRIVE MISSOURI CITY, TEXAS 77459

UNITED STATES PATENT AND TRADEMARK OFFICE NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 571-272-3350. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, MAIL STOP: ASSIGNMENT SERVICES BRANCH, P.O. BOX 1450, ALEXANDRIA, VA 22313.

RECORDATION DATE: 09/25/2009

REEL/FRAME: 023620/0668

NUMBER OF PAGES: 2

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

HAASE, RICHARD ALAN

DOC DATE: 09/24/2009

ASSIGNEE:

CLEARVALUE TECHNOLOGIES, INC.

4402 RINGROSE DRIVE

MISSOURI CITY, TEXAS 77459

SERIAL NUMBER: 10413849

FILING DATE: 04/15/2003

PATENT NUMBER: ISSUE DATE:

TITLE: CLARIFICATION OF WATER AND WASTEWATER

SERIAL NUMBER: 11041329

FILING DATE: 01/24/2005

PATENT NUMBER: ISSUE DATE:

TITLE: METHODS AND PROCESSES FOR THE MANUFACTURE OF POLYNUCLEATE METAL

COMPOUNDS AND DISINFECTANTS

023620/0668 PAGE 2

SERIAL NUMBER: 10969393 FILING DATE: 10/20/2004

ISSUE DATE: PATENT NUMBER:

TITLE: WASTE METALS RECYCLING-METHODS, PROCESSED AND SYSTEMS FOR THE

RECYCLE OF METALS INTO COAGULANTS

SERIAL NUMBER: 10790316 FILING DATE: 03/01/2004

ISSUE DATE: PATENT NUMBER:

TITLE: WATER COMBUSTION TECHNOLOGY - METHODS, PROCESSES, SYSTEMS AND

APPARATUS FOR THE COMBUSTION OF HYDROGEN AND OXYGEN

FILING DATE: 02/12/2008 SERIAL NUMBER: 12069708

ISSUE DATE: PATENT NUMBER:

TITLE: METHODS, PROCESSES AND APPARATUS FOR BIOLOGICAL PURIFICATION OF A

GAS, LIQUID OR SOLID; AND HYDROCARBON FUEL FROM SAID PROCESSES

FILING DATE: 12/07/2000 SERIAL NUMBER: 09733392

ISSUE DATE: PATENT NUMBER:

TITLE: METHOD FOR DEWATERING OF SLUDGE

SERIAL NUMBER: 09866145 FILING DATE: 05/25/2001

ISSUE DATE: PATENT NUMBER:

TITLE: METHOD FOR DEWATERING OF SLUDGE

FILING DATE: 01/02/2009 SERIAL NUMBER: 12319216

ISSUE DATE: PATENT NUMBER:

TITLE: WATER COMBUSTION TECHNOLOGY - METHODS, PROCESSES, SYSTEMS AND

APPARATUS FOR THE COMBUSTION OF HYDROGEN AND OXYGEN

FILING DATE: 08/12/1998 SERIAL NUMBER: 09140203

ISSUE DATE: 09/19/2000 PATENT NUMBER: 6120690

TITLE: CLARIFICATION OF WATER AND WASTEWATER

SERIAL NUMBER: 10348071
PATENT NUMBER: 7229550 FILING DATE: 01/21/2003

ISSUE DATE: 06/12/2007

TITLE: POTABLE WATER TREATMENT SYSTEM AND APPARATUS

SERIAL NUMBER: 08721557
PATENT NUMBER: 5846435 FILING DATE: 09/26/1996

ISSUE DATE: 12/08/1998

TITLE: METHOD FOR DEWATERING OF SLUDGE

SERIAL NUMBER: 09055870 FILING DATE: 04/06/1998

ISSUE DATE: 05/25/1999 PATENT NUMBER: 5906750

TITLE: METHOD FOR DEWATERING OF SLUDGE

SERIAL NUMBER: 09114534
PATENT NUMBER: 6136193 FILING DATE: 07/13/1998

ISSUE DATE: 10/24/2000

TITLE: PROCESS OF BIOTREATING WASTEWATER FROM PULPING INDUSTRIES

SERIAL NUMBER: 08794532 FILING DATE: 02/03/1997
PATENT NUMBER: 5705072 ISSUE DATE: 01/06/1998

ISSUE DATE: 01/06/1998 PATENT NUMBER: 5705072

TITLE: BIOTREATMENT OF WASTEWATER FROM HYDROCARBON PROCESSING UNITS

023620/0668 PAGE 3

SERIAL NUMBER: FILING DATE: 04/10/2003

PATENT NUMBER: ISSUE DATE:

PCT NUMBER: US0311250

TITLE: WATER COMBUSTION TECHNOLOGY-METHODS, PROCESSES, SYSTEMS AND

APPARATUS FOR THE COMBUSTION OF HYDROGEN AND OXYGEN

SERIAL NUMBER: FILING DATE: 10/11/2003

PATENT NUMBER: ISSUE DATE:

PCT NUMBER: US0341719

TITLE: WATER COMBUSTION TECHNOLOGY-METHODS, PROCESSES, SYSTEMS AND

APPARATUS FOR THE COMBUSTION OF HYDROGEN AND OXYGEN

SERIAL NUMBER: 10524651 FILING DATE: PATENT NUMBER: ISSUE DATE:

PCT NUMBER: US0223651

TITLE: PROCESSES AND APPARATUS FOR THE MANUFACTURE OF POLYNUCLEAR ALUMINUM

COMPOUNDS AND DISINFECTANTS AND POLYNUCLEAR ALUMINUM COMPOUNDS AND

DISINFECTANTS FROM SUCH PROCESSES AND APPARATUS

SHAREILL COLES, EXAMINER
ASSIGNMENT SERVICES BRANCH
PUBLIC RECORDS DIVISION

D/#

-1595 (Rev. 03-09) 0651-0027 (exp. 03/31/2009) 11-18-2009 RECORDATION FORM CO PATENTS ON To the Director of the U.S. Patent and Trademark Office: Please record the 103580983 1. Name of conveying party(les) Name: ClearValue Technologies, Inc. Richard Alan Haase Internal Address: Additional name(s) of conveying party(les) attached? Tyes 🔀 No 3. Nature of conveyance/Execution Date(s): Street Address: 4402 Ringrose Drive Execution Date(s) September 24, 2009 X Assignment Merger City: Missouri City Security Agreement Change of Name Joint Research Agreement State: Texas Government Interest Assignment Country: USA Executive Order 9424, Confirmatory License Additional name(s) & address(es) attached? Yes X No This document is being filed together with a new application. 4. Application or patent number(s): B. Patent No.(8) A. Patent Application No.(s) 10/413,849; 11/041,329; 10/969,393; 10/790,316; 12/069,708; 09/733,392; 6,120,690; 7,229,550; 5,846,435; 5,906,750; 6,136,193; 5,705,072 09/866,145; PCT/US03/11250; PCT/US03/41719; PCT/US 02/23651; 12/319,216; 21/040697 Additional numbers strached? Yes XNo 6. Total number of applications and patents 5. Name and address to whom correspondence concerning document should be mailed: involved: 19 Name: Richard Alan Haase 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 760.00 Internal Address: Authorized to be charged to deposit account Street Address: 4402 Ringrose Drive None required (government interest not affecting title) **B. Payment information** City: Missouri City Zip: 77459 State: Texas Phone Number: 281-261-2543 Deposit Account Number Fax Number: 281-261-6505 Authorized bles religion Raint Email Address: Richard Hassendeanvalue.com 9. Signature:

Name of Person Signing

Documents to be recorded (including cover sheet) should be faxed to (671) 273-0140, or mailed to:

Documents to be recorded (including cover sheet) should be faxed to (671) 273-0140, or mailed to:

Name of Person Signing

Director of the USPTO, P.O.Box 1460, Alexandria, V.A. 22313-1460

Mail Stop Assignment Recordation Services, Director of the USPTO, P.O.Box 1460, Alexandria, V.A. 22313-1460

Richard Alan Hass

Total number of pages including cover 'shoot, attachments, and documents: